

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Preventing Interference in Public)	RM 11663
Safety Frequencies By Requiring)	
H Mask and Mutual Aid for)	
Digital Technologies)	
)	

To: The Commission

COMMENTS OF HARRIS CORPORATION

Harris Corporation (Harris) respectfully submits these comments in response to the Federal Communications Commission’s (Commission) Notice of Harris’ Petition for Rulemaking in the above-captioned proceeding.¹ Harris lauds the Commission for acting upon the Harris petition swiftly, and urges that the Commission rapidly ensure that public safety operations are protected from interference and non-interoperable narrowband communications by adopting the Harris Petition proposals to:

- 1) Require, on a technology-neutral basis, digitally-modulated signals be certified under the H-Mask for use in public safety spectrum.
- 2) Pending final resolution of this rulemaking, prohibit any digital technology not meeting the H-Mask emissions requirements from operating in public safety spectrum.
- 3) Adopt equipment certification “technical” mandates for operation on the mutual aid channels designated in §90.203(i) and §90.203(j)(1).²

Harris is an international communications and information technology company, serving government and commercial markets in more than 150 countries. Harris is a leading technology

¹ See Harris Corporation Petition For Rulemaking, Preventing Interference in Public Safety Frequencies By Requiring H Mask and Mutual Aid for Digital Technologies, RM 11663 (filed Apr. 30, 2012 and Noticed May 31, 2012) (Harris Petition).

² See *id.*

developer and manufacturer of mission critical wireless communications for the public safety communications market with more than 500 critical communications systems deployed worldwide. Harris is committed to providing public safety with solutions to achieving true nationwide interoperability through combining its leading Internet Protocol (“IP”) based technology and in-depth knowledge of mission critical requirements. As a pioneer in the development of IP based networks for private radio and broadband applications, Harris supplies industry-leading brands such as VIDA Broadband™, EDACS®, OpenSky®, NetworkFirst™, and Provoice™. Harris is also an active member of numerous standards and technical committees including the Telecommunications Industry Association (“TIA”), the Emergency Response and Interoperability Center’s (“ERIC”) Public Safety Advisory Committee (“PSAC”), the National Public Safety Telecommunications Council (“NPSTC”), and Telecommunications Council, and the Alliance for Telecommunications Industry Solutions (“ATIS”). Harris offers first responders full-spectrum multiband products for joint public safety operations on the local, state, and federal levels: the Harris Unity XG-100 and RF-1033M.

I. The Harris Petition Will Protect First Responders From Interference and Enhance Interoperability.

As the Commission knows, 800 MHz public safety spectrum has a long history which has been plagued with interference and interoperability issues, in both cases caused by deployment of incompatible equipment. Recent and long-term examples make clear that co-existence of incompatible technologies has proven to be highly problematic, to the point of requiring re-banding. To this end, through regulation and standards, the U.S. public safety market selected use of a 12.5 kHz technology track. It is therefore important that the Commission take all steps

necessary to ensure that all technologies used in public safety frequencies successfully co-exist and interoperate.

In the immediate case, there is no credible doubt that interference will result if the Commission does not act and new entrants diverge from common industry practice and introduce technologies into public safety spectrum whose digital features do not comply with the H Mask in public safety spectrum. Harris is not alone in pointing out this danger. These concerns have been well affirmed by APCO in a recent filing:

...a vendor is currently seeking to deploy TETRA equipment on public safety spectrum, claiming that it will operate at “low power” and therefore not cause interference. Harris Corporation demonstrates in its letter, however, that even such “low power” TETRA operations could interfere with adjacent channel public safety communications. APCO International agrees with that analysis.... Therefore, we urge the FCC to prevent the introduction of TETRA or other technologies where there is evidence that such equipment could lead to interference to public safety radio communications or harm critical interoperability within public safety spectrum.³

Additionally, the Commission has long attempted to seize any opportunity to enhance interoperability among first responders. The inability to implement even the most basic of interoperability methods – mutual aid – based on a common technology will further hinder efforts to expand interoperability. Thus, it is vital that Commission rules ensure that technologies not providing analog voice capability or otherwise preventing use of mutual aid interoperability channels should not be allowed to operate in public safety frequencies.

³ APCO Ex Parte, WT Docket 11-69, ET Docket No. 09-234 at 1, 2 (filed Mar. 27, 2012).

Harris urges the Commission to recognize that the Harris Petition is not focused on picking some technologies over others, but rather on protecting key communications functions for first responders and ensuring that licensed technologies are able to co-exist and interoperate.

II. The Harris Petition Seeks to Prevent Interference for First Responders, Not Competition in the Marketplace.

PowerTrunk has begun its opposition to the Harris Petition's interference and interoperability protection provisions in an ex parte filing, claiming that Harris' efforts relate to stifling competition, not enhancing first responder communications.⁴ This assertion is based upon the flawed presumption that Harris does not have a B-Mask capable technology that could operate under Commission rules as interpreted by PowerTrunk and therefore compete with PowerTrunk's technology at this time.

In truth, Harris and other companies offer numerous technologies that are compatible with the B-Mask. All companies would welcome the opportunity to compete using B-Mask compliant digital technologies. However, to avoid the interference inevitable resulting from the utilization of B-Mask digital technologies in either Public Safety or Business and Industrial spectrum manufacturers have chosen to certify digital equipments against the C, D, E, H, or G masks appropriate for digital equipment. Harris is unaware of any manufacturer, other than PowerTrunk, offering B-Mask only certified digital equipment for utilization in Public Safety spectrum, and for that matter Business and Industrial spectrum.

⁴PowerTrunk Ex Parte, WT Docket 11-69, ET Docket No. 09-234, 1 (filed May 8, 2012).

In the event the Commission fails to act and does not provide rule modifications codifying responsible industry practice and mandating inclusion of a least common denominator technology for operation on designated public safety interoperability/mutual aid channels, there likely will be an exponential rise in cases of unacceptable interference to public safety operations and an unacceptable decrease of interoperability. Harris and other manufacturers may be forced to offer digital technologies certified against the B-Mask, and may be forced to delete the least common denominator technologies from product offerings in order to compete equally. Thus, it is truly for the sake of first responder communications and the missions they support, and not a fear of competition, which drives Harris in this matter.

III. Conclusion

For the foregoing reasons, Harris requests the Commission immediately initiate an appropriate rulemaking and swiftly adopt the Harris Petition.

Respectfully Submitted,

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